

Notice of Allowability

Application No.

10/816,619

Examiner

CAMQUY TRUONG

Applicant(s)

BOSS ET AL.

Art Unit

2195

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 9/17/09.
2. ☒ The allowed claim(s) is/are 1, 3-7, 10-15, 18-27, 29-36 now renumbered as 1 - 30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Duane N. Moore (Registration number: 53,352), on 10/1/09.
3. The claims have been amended as follows:
 1. A method of allocating a plurality of computing resources among a plurality of users, comprising:
 - collecting a plurality of performance data including a time percentage in which a computing resource is engaged in excessive paging activity;
 - applying a plurality of policy rules to the collected performance data;
 - analyzing the collected performance data to determine if there exists an actionable item;
 - if an actionable item exists, applying a plurality of metrics including a job description and job level of a user to filter the collected performance data; and

automatically allocating the computing resources from an automatic hardware of a resource allocator by at least one action based on the actionable item using the collected performance data that has been filtered: upgrading a component, replacing the component, upgrading the computing resource, and replacing the computing resource.

2. (Cancelled).
3. The method of claim 1, wherein the collected performance data comprises a time percentage in which the computing resource is engaged in excessive CPU utilization.
4. The method of claim 1, wherein the collected performance data comprises a time percentage in which the computing resource is constrained by input/output devices.
5. The method of claim 4, wherein the collected performance data comprises an association of a plurality of time percentages with an application process operating on the computing resource.
6. The method of claim 1, wherein collecting the performance data comprises logging a plurality of events occurring on the computing resource.

7. The method of claim 1, wherein collecting the performance data comprises logging a plurality of errors experienced by the computing resource.

8-9. (Cancelled).

10. The method of claim 1, wherein the plurality of metrics comprise an allowable component performance of the component correlated with the job description and job level of the user

11. The method of claim 1, wherein the plurality of metrics comprise an allowable system performance of the computing resource correlated with the job description and job level of the user.

12. A method for identifying an optimum allocation of a plurality of component resources and a plurality of computing resources amongst a plurality of users, the method comprising:

specifying a set of requirements for the optimum allocation of the component resources and the computing resources;

identifying a first set of metrics that indicate a performance level at which a component resources and computing resources are replaced;

identifying a second set of metrics that indicate a performance level at which the component resources and the computing resources are upgraded;

correlating the first set of metrics and the second set of metrics with a user's job description and user's job level to create a metrics table;

invoking an automatic hardware allocation utility of a resource allocator, wherein the first set of metrics, the second set of metrics and the metrics table are ~~made available to~~ used in the automatic hardware allocation utility for consideration; and

receiving an optimum allocation of the component resources and the computing resources from the automatic hardware allocation utility, wherein the specified set of requirements are satisfied.

13. The method of claim 12, further comprising collecting a plurality of performance data including a time percentage in which a computing resource is engaged in excessive paging activity; and wherein the collected performance data comprises an association of a plurality of time percentages with an application process operating on the computing resource.

14. The method of claim 13, wherein collecting the performance data comprises logging a plurality of events occurring on the computing resource.

15. The method of claim 13, wherein collecting the performance data comprises logging a plurality of errors experienced by the computing resource.

16-17. (Cancelled).

18. The method of claim 12, wherein any one of the first set of metrics and the second set of metrics comprises an allowable component performance of the component resource correlated with a the user's job description and job level.

19. The method of claim 12, wherein any one of the first set of metrics and the second set of metrics comprises an allowable system performance of the computing resource correlated with the user's job description and job level.

20. The method of claim 13, further comprising analyzing the collected performance data to determine if there exists an actionable item; if an actionable item exists, applying a plurality of metrics to filter the collected performance data; and automatically allocating the computing resources by at least one action based on the actionable item: upgrading a

component, replacing the component, upgrading the computing resource, and replacing the computing resource.

21. A computer system for allocating a plurality of computing resources among a plurality of users, comprising:

a performance agent

that collects a plurality of performance data including a time percentage in which a computing resource is engaged in excessive paging activity and

that applies a plurality of policy rules to the collected performance data;

an automatic hardware of a resource allocator analyzes the collected performance data to determine if there exists an actionable item;

if an actionable item exists, a resource identification module applies a plurality of metrics including a job description and job level of a user to filter the collected performance data; and

the automatic hardware of resource allocator automatically allocates the computing resources by at least one action based on the actionable item using the collected performance data that has been filtered: upgrading a component, replacing the component, upgrading the computing resource, and replacing the computing resource.

22. The system of claim 21, wherein the collected performance data

comprises a time percentage in which the computing resource is engaged in excessive paging activity.

23. The system of claim 21, wherein the collected performance data comprises a time percentage in which the computing resource is engaged in excessive CPU utilization.

24. The system of claim 21, wherein the collected performance data comprises a time percentage in which the computing resource is constrained by input/output devices.

25. The system of claim 24, wherein the collected performance data comprises an association of a plurality of time percentages with an application process operating on the computing resource.

26. The system of claim 21, wherein the performance agent logs a plurality of events occurring on the computing resource.

27. The system of claim 21, wherein the performance agent logs a plurality of errors experienced by the computing resource.

28. (Cancelled).

29. The system of claim 21, wherein the pluralities of metrics comprise an allowable component performance of the component correlated with the job description and job level of the user.

30. The system of claim 21, wherein the plurality of metrics comprise an allowable system performance of the computing resource correlated with the job description and job level of the user

31. The method of claim 1, wherein a level of said excessive paging activity is determined based on the job description of the user.

32. The method of claim 1, wherein a level of said excessive paging activity is determined based on the job level of the user.

33. The method of claim 13, wherein a level of said excessive paging activity is determined based on the job description of the user.

34. The method of claim 13, wherein a level of said excessive paging activity is determined based on the job level of the user.

35. The system of claim 21, wherein a level of said excessive paging activity is determined based on the job description of the user.

36. The system of claim 21, wherein a level of said excessive paging activity is determined based on the job level of the user.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAMQUY TRUONG whose telephone number is (571)272-3773. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai An can be reached on (571)272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/816,619

Art Unit: 2195

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

Camquy Truong
September 26, 2009